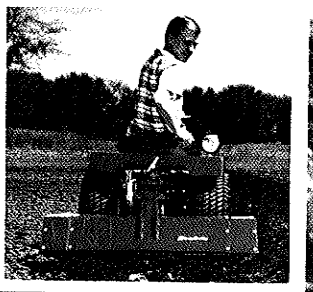
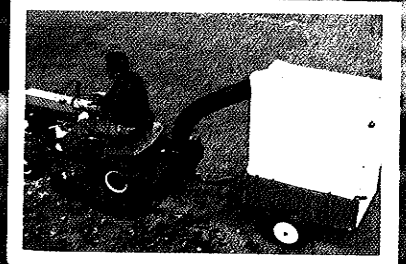
Simplicity®

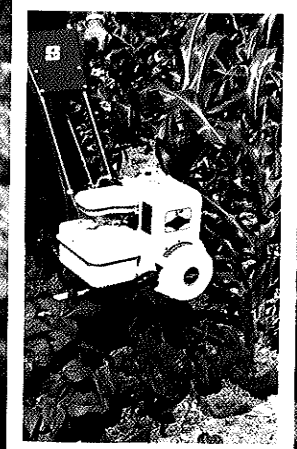
OWNER'S MANUAL



ROTICUL 3 H.P. ROTARY TILLER

Mfr's. No. 552





CONGRATULATIONS!

. . . on your choice of SIMPLICITY equipment.

This great new product is engineered with imagination and built with integrity to assure you maximum service and performance for years to come. To completely understand the operation of your equipment and to take full advantage of its many fine built-in features, study this instruction manual thoroughly before operating the machine. The little time you spend reading now will repay you many times over in the time you save and the satisfaction you gain in using your equipment properly and safely.

SAFETY FIRST

PROTECT YOURSELF AND OTHERS BY FOLLOWING THESE SAFETY RULES

* **ALWAYS** inspect the area to be worked – note all grades, obstructions, wet spots and other potential hazards and pick up all foreign objects before mowing.

* **ALWAYS** keep children and pets a good, safe distance away.

* **ALWAYS** know your controls and how to stop quickly in an emergency – read the owner's manual thoroughly.

* **NEVER** allow anyone to operate the equipment without full instruction and knowledge of safe operating procedures.

* **NEVER** handle gasoline carelessly. Use an approved container and fill the tank out of doors. Wipe up spilled gasoline. Do not smoke while fueling the engine.

* **NEVER** add gasoline to a running engine. Stop engine and allow it to cool a few minutes before adding fuel. Replace filler cap securely.

* **NEVER** operate equipment unless all guards and shields are in place.

* **ALWAYS** keep hands, feet and clothing away from power driven parts.

* **ALWAYS** disengage the power take off drives, stop the engine, and remove the key (on electric start models) before leaving the machine even if only for a moment.

* **ALWAYS** stop the engine before servicing or adjusting machine or equipment. Remove the spark plug wire on walk behind mowers.

* **ALWAYS** stop the engine and inspect for damage immediately after striking an obstruction or foreign object. Repair damage before restarting.

* **NEVER** overspeed the engine or alter governor settings. Excessive speed is always unsafe and shortens engine life.

* **ALWAYS** properly maintain the equipment. Check all fasteners, guards and parts.

* Mow across slopes with walk behind units and up and down them with riding units. Do not use power mowers on slopes greater than 40% grade. (Four feet vertically for each 10 feet horizontally.)

* **ALWAYS** stop the engine on walk behind units or disengage the blade drive and raise the mower on riding units before crossing gravel drives.

* Do not operate the engine where carbon monoxide can collect.

BUILT IN SAFETY FEATURES CAN BE EFFECTIVE ONLY IF PROPERLY MAINTAINED AND UTILIZED.

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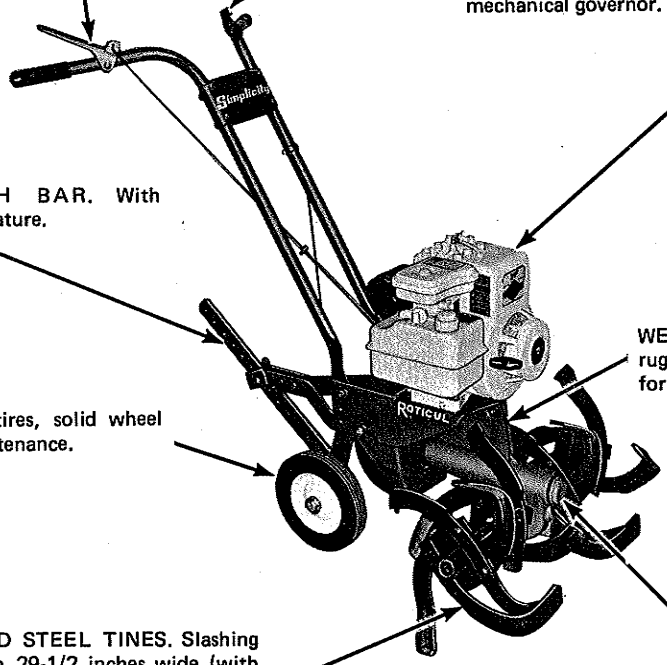
TOUCH-O-MATIC CLUTCH CONTROL. Simply squeeze the lever to engage the tiller drive, release to stop.

HANDLE-MOUNTED THROTTLE LEVER. Combined On-Off-Start and speed control, handle-mounted for convenience and safety.

3 H.P. BRIGGS & STRATTON ENGINE. Four-cycle, one cylinder air-cooled power with Lo-Tone muffler, recoil starting, mechanical governor.



ADJUSTABLE DEPTH BAR. With Simplicity quick-change feature.

WELDED STEEL FRAME. Heavy-duty with rugged cross-bracing, yet compact and balanced for easy tilling.

WHEELS. Solid rubber tires, solid wheel bearings requiring no maintenance.

HIGH-CARBON, FORGED STEEL TINES. Slashing type design, adjustable to 29-1/2 inches wide (with extensions). Slice into the hardest baked, crusty surface to 7 inches deep, kneading the soil with smooth, spading action, leaving a crumbly texture perfect for planting.

WORM GEAR DRIVE. Unique design requiring Special Worm Gear lubricant to eliminate maintenance and assure durability. Tapered roller bearings front and rear.

ROTICUL 3 H.P. ROTARY TILLER

Mfr's. No. 552

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1970 SIMPLICITY 3 H.P. ROTICUL SPECIFICATIONS

ENGINE	MAKE: BRIGGS & STRATTON	■ MODEL NO: 80200 ■ STROKE: 1-3/4 Inches ■ CYCLES: 4 ■ DISPLACEMENT: 7.75 Cu. In. ■ CYLINDERS: 1 ■ CRANKSHAFT ■ BORE: 2-3/8 Inches PLANE: Horizontal
	STARTER	Manual Rewind Up-Angle Side Pull
	CHOKE	Manual
	GOVERNOR	Remote Controlled Mechanical
	IGNITION	Patented, High-Tension Magneto with Ceramic Magnets
	LUBRICATION	Gear Impeller System - 40% Slope Operation
		CRANKCASE CAPACITY: 1-1/4 Pints
	FUEL CAPACITY	2 Quarts
	AIR CLEANER	Sealed Joint Housing, Reusable Oiled Foam Element
	MUFFLER	Quiet, Low Back Pressure Type, Side Discharge
TRANSMISSION	TYPE	Worm and Gear
	MATERIAL	WORM: Carburized Steel
		GEAR: Bronze
	BEARINGS	FRONT: Tapered Roller Bearing
		REAR: Tapered Roller Bearing
	SEALS	DOUBLE LIP: Dirt Excluding
	LUBRICATION	Special Simplicity Worm Gear Oil
	HOUSING	Cast Iron
	CLUTCH	Touch-O-Matic V-Belt
TINES	TYPE	Slashing
	MATERIAL	Forged, High-Carbon Steel
	TILLING WIDTH	22-1/2 In. Standard, 32-1/2 In. with Tine Extensions
	TILLING DEPTH	0 to 7 Inches, Adjustable
	ATTACHMENTS	TO HUB: Bolted
		TO SHAFT: Pin and Spring Clip
	DRIVE	INNER: Pin Type Floating Drive
		OUTER: Pin and Torsion Plate Floating Drive
	SPEED	75 RPM at Full Engine Speed
DEPTH BAR	ATTACHMENT	Pin and Spring Clip
	ADJUSTMENT	0 to 7 Inches Tilling Depth
CONTROLS	LOCATION	FORWARD CLUTCH: Right Handle, Top
		THROTTLE: Left Handle
		REWIND STARTER AND CHOKE: On Engine
CHASSIS	FRAME	Heavy-Duty, Electrically Welded with Cross-Bracing
	TIRES	8 x 1.75 Solid Rubber
	WHEEL BEARINGS	Solid, Sintered Iron
OVERALL DIMENSIONS	LENGTH	51 Inches
	WIDTH	26 Inches (Without Tine Extensions)
	HEIGHT	TO TOP OF HANDLE: 38-1/4 Inches
		TO TOP OF ENGINE: 27-3/4 Inches
	WEIGHT	NET (DRY): 113 Lbs.
		SHIPPING (DRY): 123 Lbs.

SAFETY FIRST

In addition to the basic safety rules appearing on the inside front cover, follow these safety tips.

■ Release the clutch lever and stop the engine before cleaning the tines, removing obstacles, making adjustments or when leaving the operating position.

■ Never allow children or pets to cross your path or cause distractions in the area while operating.

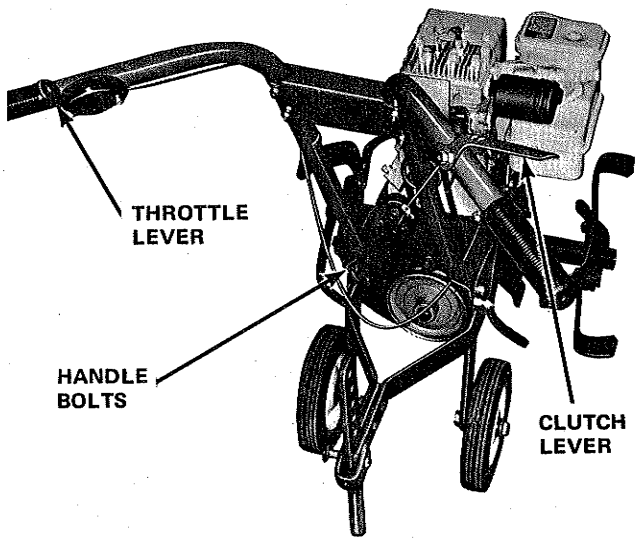
■ Use caution to avoid slipping or falling, especially when operating in reverse.

CONTROLS

1. THROTTLE LEVER: To adjust engine speed or to stop the engine, move the lever forward or back.

2. CLUTCH LEVER: Squeeze the lever to engage the tiller drive, release to stop.

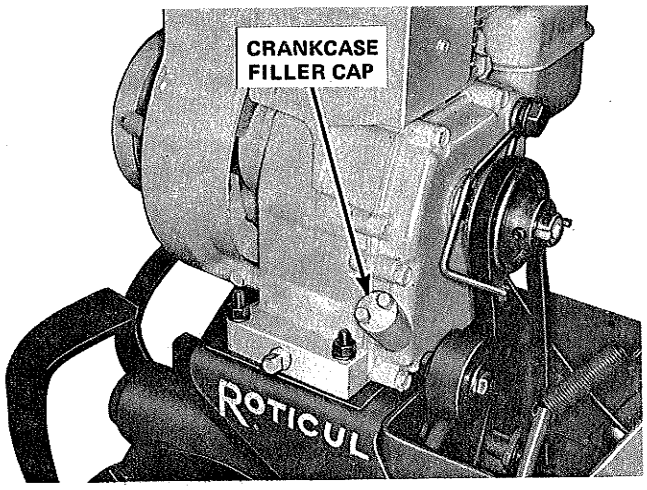
3. HANDLES: Loosen the capscrews at the lower end of the handles and pivot the handle assembly to desired height. Tighten screws securely. The most convenient height is best judged under operating conditions.



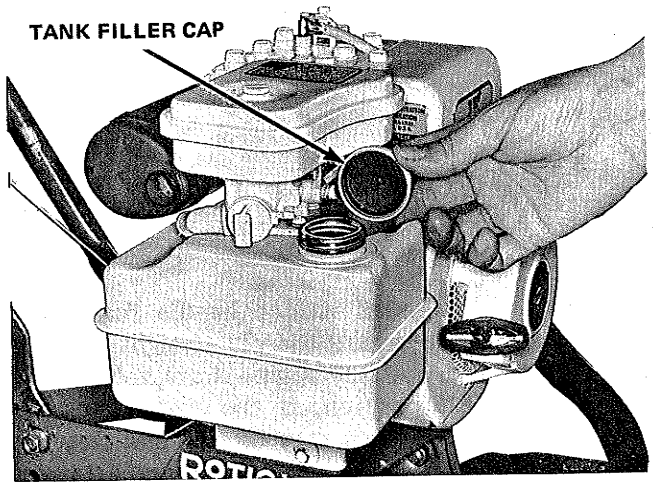
BEFORE STARTING

Before attempting to start the engine, read the engine owner's manual thoroughly. Be sure to have on hand sufficient quantities of clean, fresh "Regular" grade gasoline, and 10W-30 grade MS engine crankcase oil.

1. Remove the crankcase filler cap, located on the left side of the engine, by turning counterclockwise. Fill with 10W-30 oil until level with the top of the neck. Reinstall filler cap securely. Check the oil level every time fuel is added.



2. Remove the fuel tank filler cap and fill tank completely with clean, fresh "Regular" grade gasoline.



DO NOT MIX OIL WITH GASOLINE.

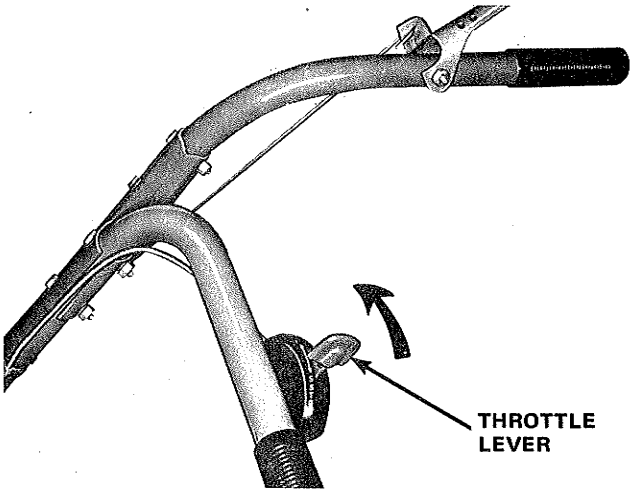
CAUTION

GASOLINE IS HIGHLY INFLAMMABLE. AVOID OVERFILLING AND WIPE UP ANY SPILLED FUEL. ALLOW NO OPEN FLAME, SMOKING OR MATCHES NEAR THE AREA WHEN REFUELING.

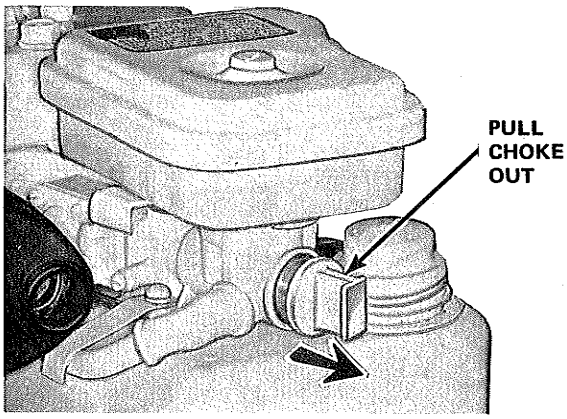
Replace the filler cap securely. Store gasoline only in small quantities - prolonged storage produces gum and harmful deposits. If it is necessary to store gasoline for long periods, add STA-BIL brand gasoline stabilizer, available at your Simplicity dealer. (See "Off-Season Storage.")

STARTING

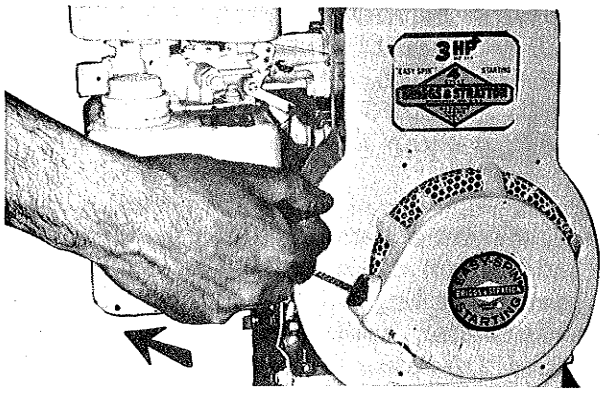
1. Move the throttle lever 1/2 way forward.



2. Pull choke plunger out to "CHOKE" position.

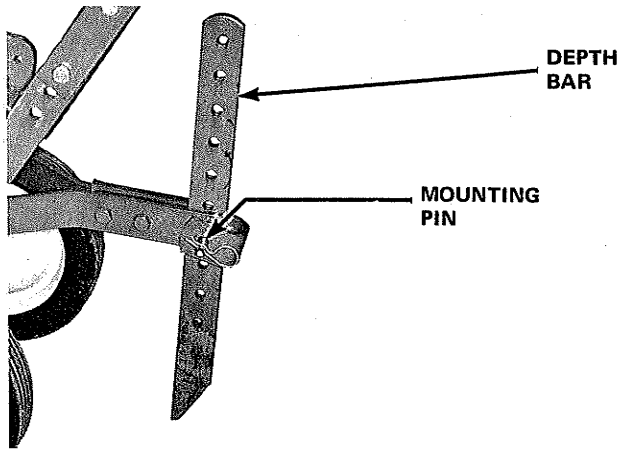


3. Grasp the recoil starter handle firmly in your right hand and pull sharply straight out to start the engine. After the engine starts, return the choke to "OFF" position. If the engine fails to start after 4 or 5 pulls it may be flooded. Return the choke to "OFF" position and pull recoil starter handle to clear the excess fuel. Always return the handle by hand - DO NOT RELEASE THE HANDLE WITH THE ROPE EXTENDED. To stop the engine, pull the throttle lever all the way back.

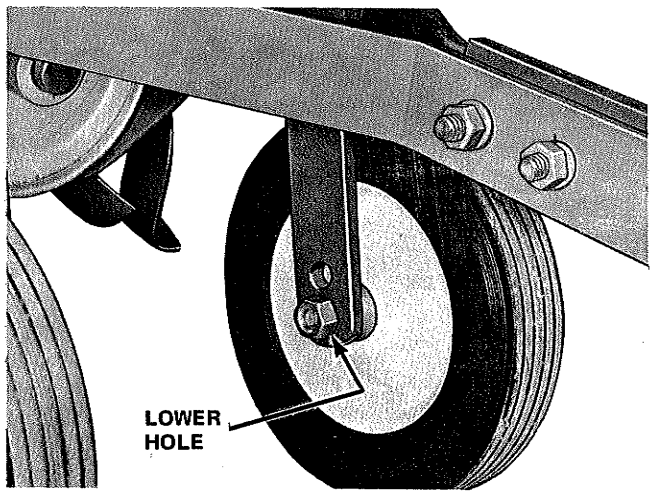


BEFORE OPERATING

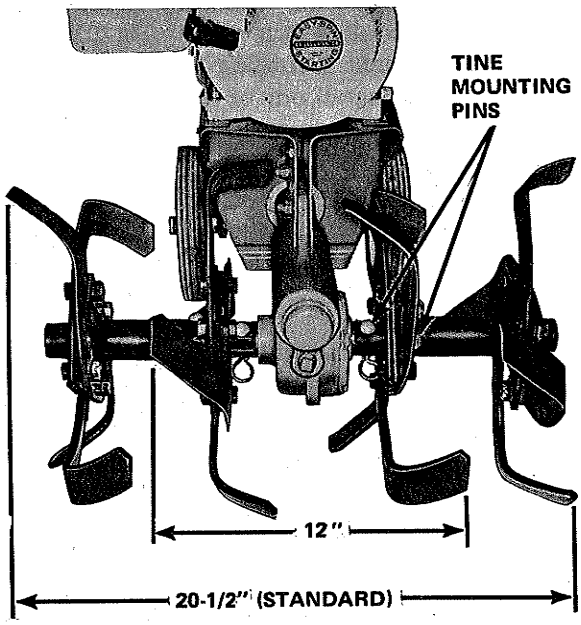
1. The depth bar setting determines the depth of tilling. To till 4 to 6 inches deep, install the bar mounting pin in the second or third hole from the TOP. Simply pull out the hairpin cotter to change pin location. Be sure to install the bar with the digging tip as shown. THE DEEPER THE DEPTH BAR IS SET INTO THE SOIL, THE DEEPER THE TINES WILL DIG.



2. Check to be sure that the wheels are mounted in the LOWER holes of the frame legs as shown.



3. The standard tine arrangement shown allows a tilling width of 20-1/2 inches. The two outer sets of tines can be removed to narrow the width to 12 inches if desired. Simply pull out the hairpin cotters and remove the mounting pins. Tine assemblies are left and right hand. Switch the two inner tines for an 8-1/2 inch wide path. Switch the outer tines and add them to change the width to 16 inches. Always be sure when rearranging tines that the sharpened edges face forward. A set of tine extensions is available to extend the width to 29-1/2 inches. See your Simplicity dealer.

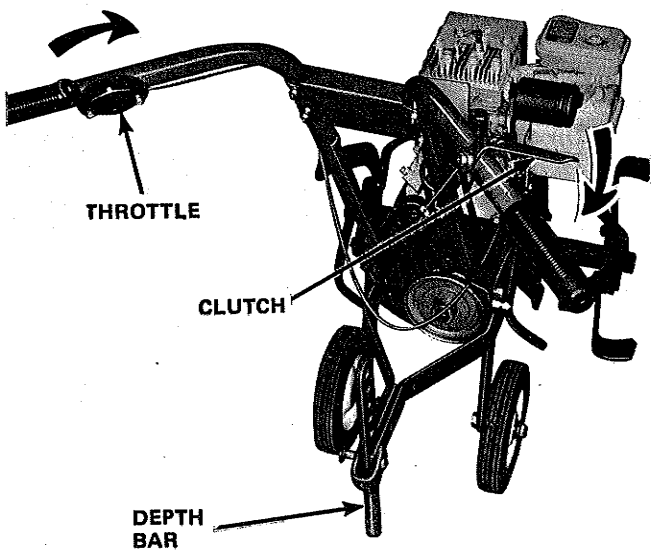


OPERATION

After starting, move the throttle lever to 3/4 forward.

To engage the tiller drive, squeeze the clutch lever. To stop, merely release the clutch lever.

Use the depth bar to furnish the necessary drag rather than pulling back on the handles. Push DOWN on the handles to LOWER the depth bar, slowing forward speed, and deepening the bite of the tines. Upward thrust on the handles increases forward speed and raises tilling depth.



LET THE DEPTH BAR DO THE WORK

The Roticul is scientifically designed to cultivate the soil with a minimum of physical effort on the part of the operator. When operating for the first time, proceed slowly and carefully to get the "feel". Experience will determine the best speed for your requirements, the correct handle pressure and depth bar setting. Experiment with the clutch lever, using the quick response for positive control in close areas.

Do not till when the soil is very wet. This causes lumps which are difficult to work up. If the soil is extremely hard and dry it may be desirable to cross-till an area at shallow depth first, then till in the direction of planting rows on the second pass at the final depth.

A furrow opener shovel is available from your Simplicity dealer for use in digging furrows for crops which are planted in rows, such as potatoes. See "Accessories".

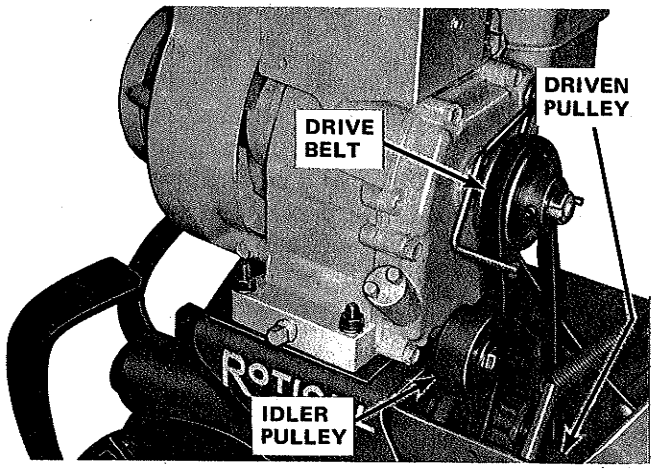
TROUBLE SHOOTING

IF ENGINE FAILS TO START, check the following:

1. Fuel tank is full.
2. Throttle lever is set to 1/2 open.
3. Spark plug cable is securely connected.
4. Choke plunger is pulled out to "CHOKE" position or in "OFF" position (in) if engine appears to be flooded. To clear a flooded engine, push the choke in and pull the starter rope several times to clear the excess fuel.

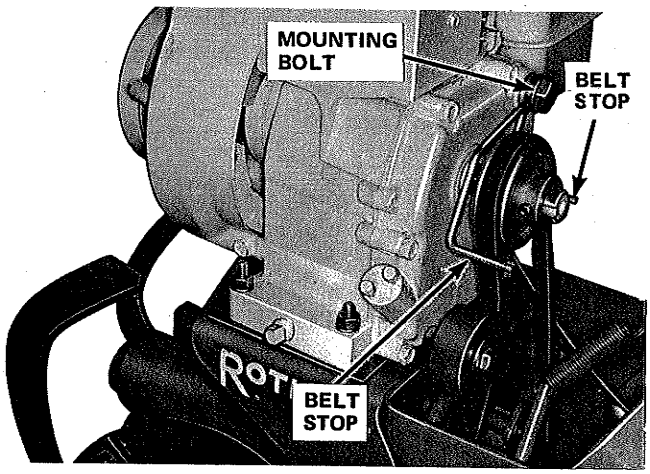
IF BELT SLIPPAGE OCCURS, check the following:

1. Belt may be stretched or worn excessively.
2. Belt may be greasy or oily. If so, use Energine or a similar cleaning fluid on a rag to clean. An alternate method is to sprinkle a handful of Drizit or Kitty-Litter compound on the belt while running.
3. Pulleys may be misaligned.
4. Belt Tension may be too tight. (See "Adjustments.")

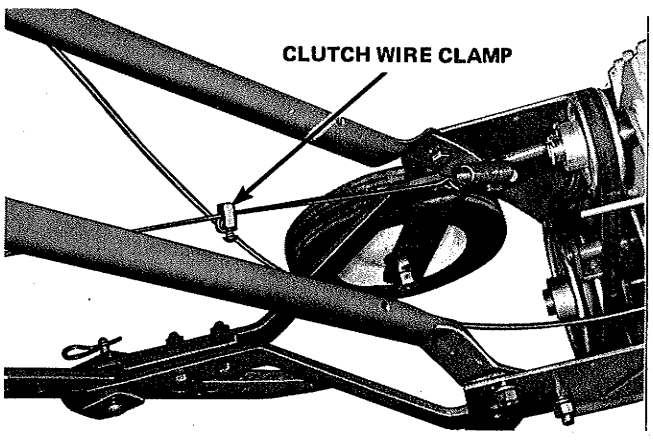


ADJUSTMENTS

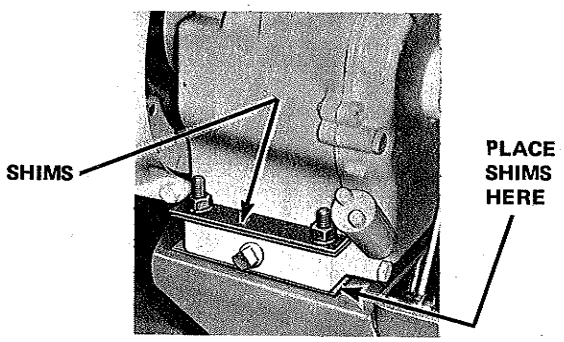
BELT STOPS: Make sure the belt stops are as near as possible to the belt when running. Loosen the stop mounting bolt to adjust position or bend the stops where necessary to within 1/8 inch of belt when running.



CLUTCH ADJUSTMENT: Check for proper clutch engagement. Belt must not be running when the clutch lever is released and must not slip when lever is engaged. If adjustment is required, loosen the round head screw in the control wire clamp and remove excess slack in the wires. Tighten the screw securely.



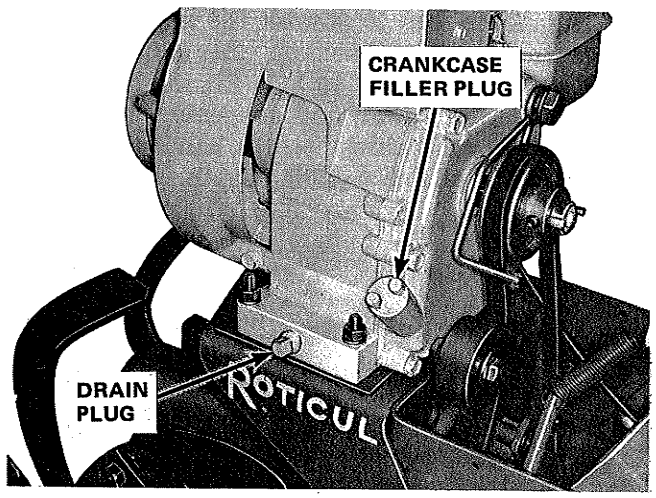
DRIVE BELT SLACK: After some use, the drive belt may stretch so that clutch adjustment cannot be made at the control wire clamp. If this occurs, remove the engine mounting nuts, remove the shims shown and install one or more of them under the engine. Tighten the mounting nuts securely.



MAINTENANCE

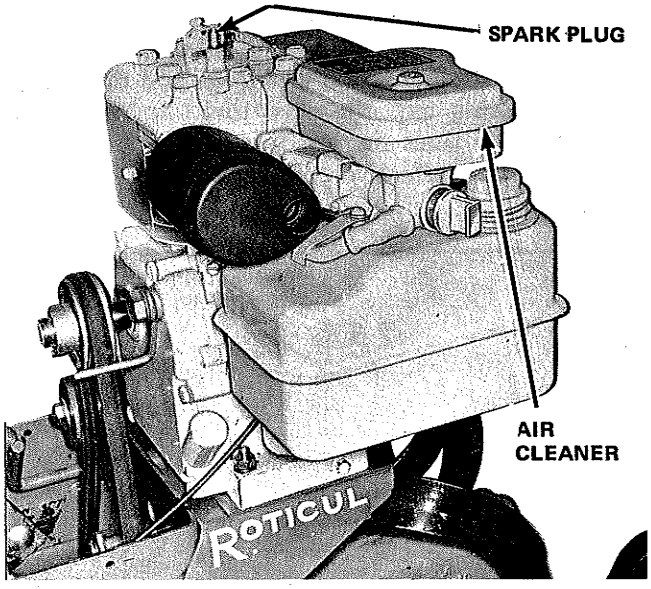
To keep your Simplicity Roticul at peak operating efficiency, these maintenance procedures must be followed regularly:

1. Read the engine owner's manual thoroughly. Always check the engine oil level before starting. Add 10W-30 grade MS oil until level with the top of the tiller neck. Change crankcase oil and re-oil the air cleaner foam element every 25 hours of operation, more often under extremely dusty or dirty conditions.

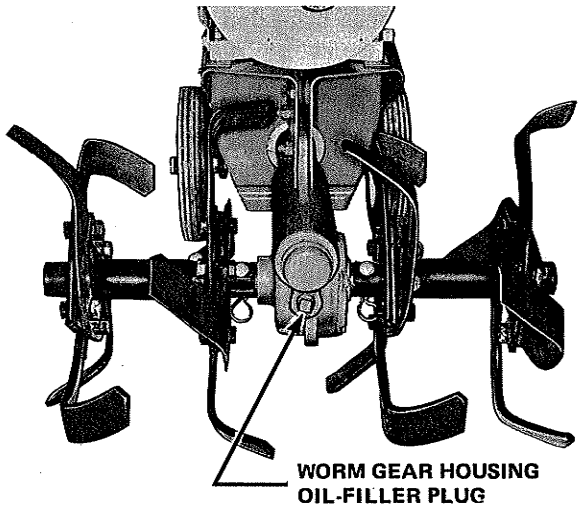


2. Turn the screw on the air cleaner cover counterclockwise to loosen. Remove the cover. Wash the foam air cleaner element in Kerosene or liquid detergent and dry it thoroughly. Saturate it with engine oil, squeeze out the excess and reinstall.

3. Clean and re-gap the spark plug every 100 hours of operation. Gap to .030 inches. DO NOT clean plug by sandblasting. Grease the plug threads before reinstalling.



WORM DRIVE HOUSING: The worm gear drive on the Roticul is lubricated with special worm gear oil available from your Simplicity dealer.



DO NOT USE ORDINARY TRANSMISSION OIL. Any other oil except Simplicity Worm Gear Oil may cause gear failure. The worm drive housing is filled at the factory, but the level must be checked every 1 to 5 hours of operation. To add oil, tip the Roticul back until the handles rest on the ground, remove the filler plug and add worm gear oil. FILL UNTIL THE OIL IS LEVEL WITH THE PLUG HOLE WHEN THE TINES ARE RESTING ON THE GROUND. *DO NOT OVERFILL.* Screw the plug back in securely.

CAUTION

DAMAGE TO THE WORM GEAR DRIVE WHICH RESULTS FROM USE OF ANY OTHER LUBRICANT THAN SIMPLICITY BRAND SPECIAL WORM GEAR OIL WILL AUTOMATICALLY INVALIDATE THE WARRANTY.

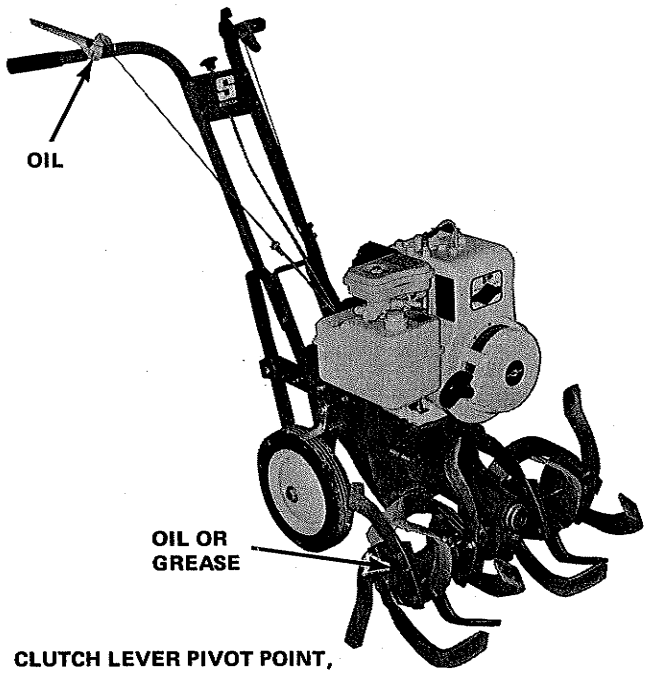
NOTE

The worm drive housing may become quite warm while operating. This is completely normal and no harm to gears will occur if the housing is kept filled as specified with the special Worm Gear Oil.

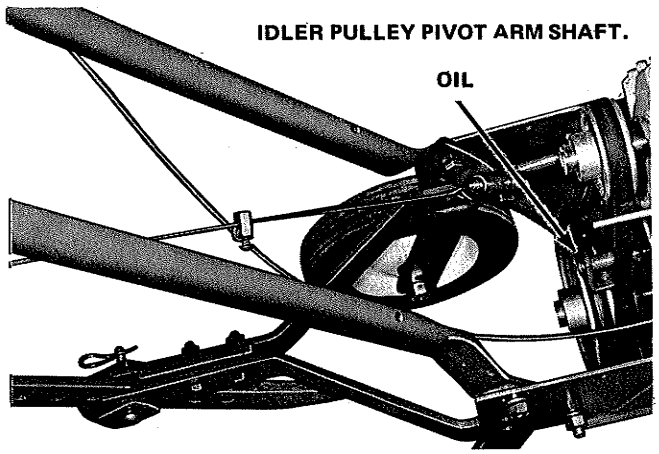
There is an Oilite bronze filter in the vent hole located at the rear of the worm drive housing. DO NOT REMOVE the filter for any reason.

GENERAL LUBRICATION: Apply light motor oil occasionally at the points indicated to reduce wear and assure free movement. Be careful not to get oil on the drive belts. DO NOT oil wheel bearings which are self-lubricated. Additional oil collects dirt and causes extra wear.

Apply a light coat of grease or oil to the inside of the tine hubs and on the tine shaft to prevent rust.



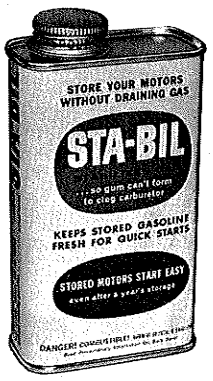
CLUTCH LEVER PIVOT POINT, TINE HUBS AND TINE SHAFT.



GENERAL REPAIRS: To prevent rust, sand off and paint any parts or areas which become chipped or damaged. Tighten all bolts, nuts and fasteners securely.

OFF-SEASON STORAGE

1. Drain the fuel tank completely by running the engine until it stops. If desired, fuel can be stored in containers or in the tank by using STA-BIL brand gasoline stabilizer, available at your Simplicity dealer. Add a can capful to the fuel in the tank or follow the directions on the can for containers of other capaicty. This additive prevents formation of gum and varnish for up to one year, providing easier starting and a clean fuel system.



2. Drain and refill crankcase while engine is warm.

3. Remove spark plug, pour 1 oz. 10W-30 oil into cylinder through plug hole. Crank engine a few times to distribute oil. Reinstall plug.

4. Clean dirt and chaff from cylinder head fins and engine housing.

SERVICE

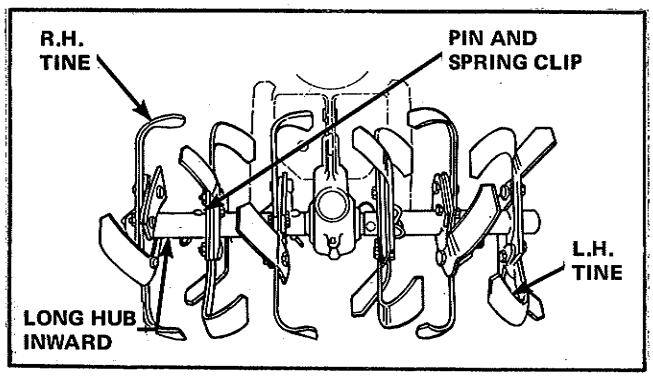
For replacement parts, engine service and machine maintenance, see your Simplicity dealer.

USE ONLY SIMPLICITY DRIVE BELTS AND REPLACEMENT PARTS.

ACCESSORIES

AVAILABLE FROM YOUR SIMPLICITY DEALER.

MFR'S. NO. 212 - TINE EXTENSION SET. The set consists of a left hand and a right hand tine assembly with mounting pins and spring clips. Mount the long hub of each tine over the outside end of the standard tine assembly and install the pin and spring clip. Be sure that the sharpened edges of the tines on top face forward. This set increases the effective tilling width to 32-1/2 inches.

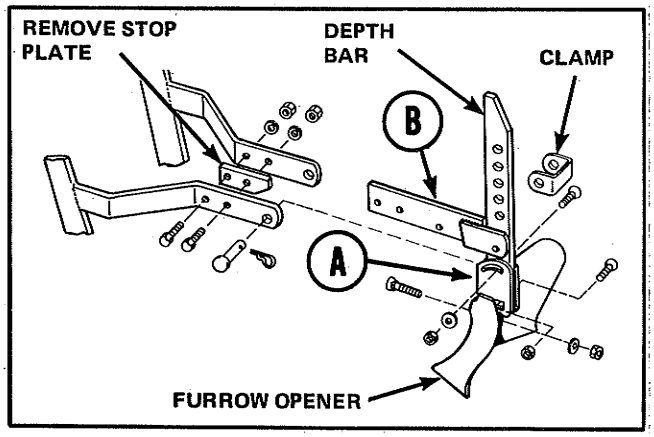


MFR'S. NO. 340 - 8 INCH FURROW OPENER. The furrow opener is intended for digging furrows for crops which must be planted in rows. To install, proceed as follows:

1. Remove the depth bar, turn it upside down and bolt it to the tool holder (A) with the carriage bolts, washers and nuts provided.

2. Remove the stop plate from between the frame supports and install the extension support (B) with the old hardware.

3. Position the depth bar in the extension support and reinstall the depth bar clamp using the pin and spring clip provided. Bolt the furrow opener to the tool holder as shown.



MFR'S. NO. 281 - WORM GEAR OIL. Case of 12 cans of special Simplicity Worm Gear Oil for Roticuls.

SIMPLICITY'S NEW EQUIPMENT WARRANTY

The Company warrants Simplicity products to be free from defects in material and workmanship, except the Company makes no warranty, express or implied, with respect to tires, engines, generators and voltage regulators, which are warranted by their respective manufacturers. Any part covered by this warranty which is proven defective within one year (45 days for equipment used for rental, municipal or commercial purposes) under normal use, from date of purchase, will be replaced without charge, provided such part is returned to the factory, (if requested), and is found to be defective upon examination at the factory. This warranty does not apply to any Simplicity products altered outside of the Simplicity factory. THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, PERFORMANCE, OR OTHERWISE. The Company's obligation under its warranty is strictly and exclusively limited to the replacement of such parts, and in no event shall the Company be liable for any other damages, whether direct, immediate, incidental, special, or consequential. Simplicity Manufacturing Company, Inc., reserves the right to modify or change specifications without prior notification. There are no warranties which extend beyond the description of any Simplicity product.

TINE WARRANTY

Simplicity Manufacturing Company warrants rotary tiller tines against breakage for the period not to exceed the normal life of the rotary tiller; and will replace broken tines directly to the customer at no charge; provided broken tines are returned prepaid to the Company's service department, Port Washington, Wisconsin.

Should warranty service be necessary, the information below should be presented to the authorized SIMPLICITY Dealer.

Customer's Name _____

Address _____

Mfg. No. _____ Serial No. _____

Date Purchased _____

Purchased From _____

Address _____

Engine Model No. _____ Serial No. _____ Type No. _____

To obtain replacement parts from dealer, advise quantity, part number and description.

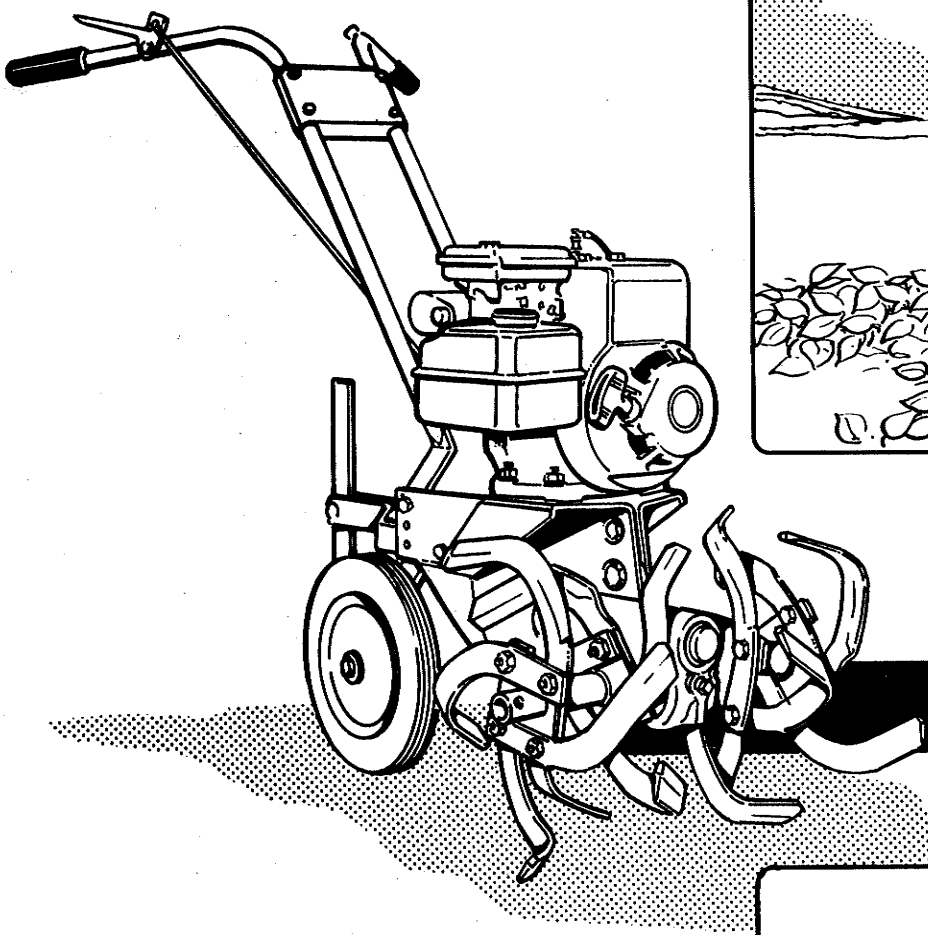
LUBRICATION & MAINTENANCE RECORD

DATE PERFORMED	GREASE JOB	OIL CHANGE	TUNE UP	DESCRIPTION (OTHER MAINTENANCE)	HOURS RUN

Simplicity®

SIMPLICITY MANUFACTURING COMPANY, INC.

Simplicity®



Mfr's. No. 552

1970 PRODUCTION YEAR

3 H.P. ROTICUL

1639 #

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SIMPLICITY MANUFACTURING COMPANY

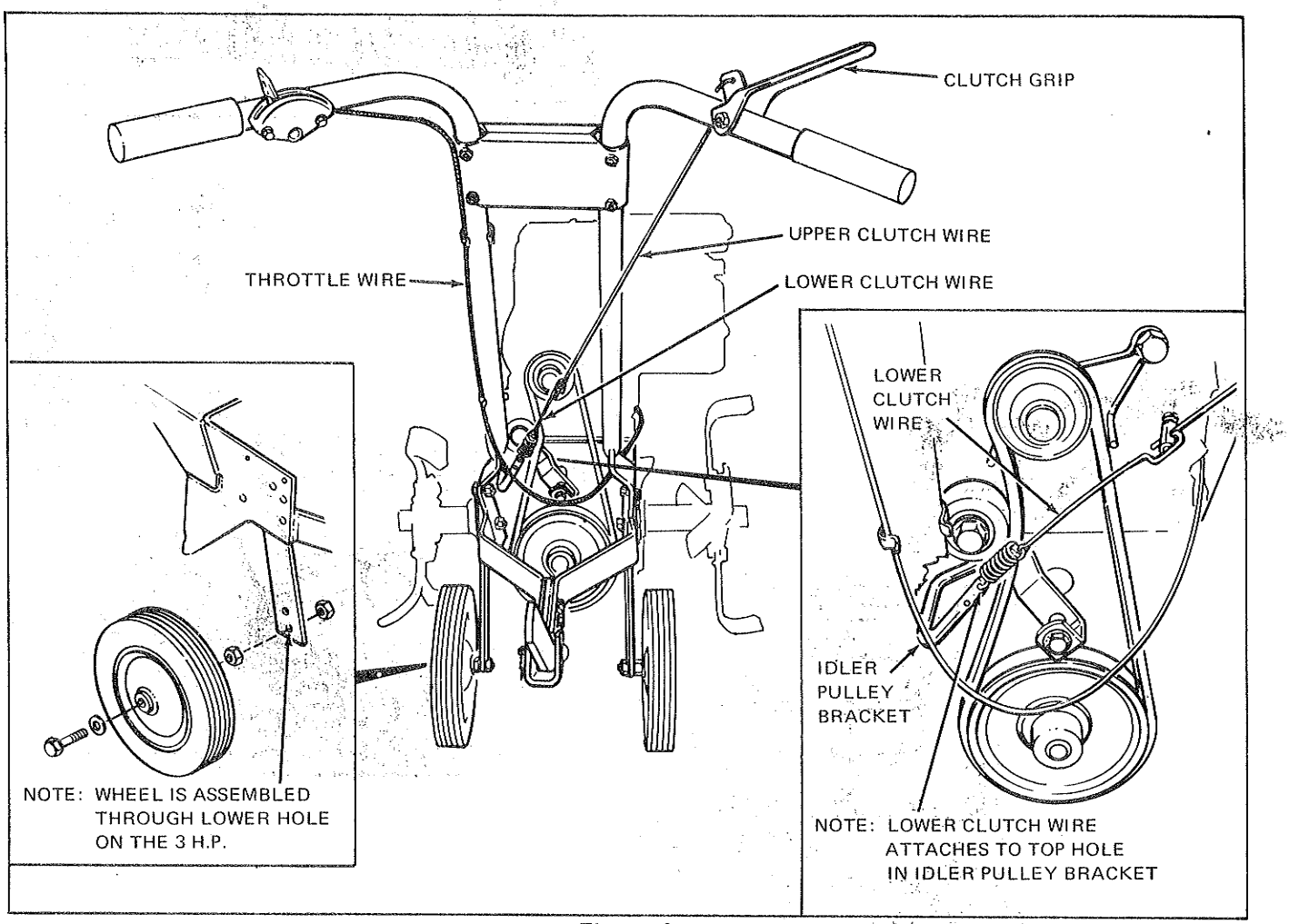

CLUTCH GRIP
UPPER CLUTCH WIRE
THROTTLE WIRE
LOWER CLUTCH WIRE
LOWER CLUTCH WIRE
IDLER PULLEY BRACKET
NOTE: WHEEL IS ASSEMBLED THROUGH LOWER HOLE ON THE 3 H.P.
NOTE: LOWER CLUTCH WIRE ATTACHES TO TOP HOLE IN IDLER PULLEY BRACKET

Figure 1.

PACKING

The No. 552 Roticul is delivered complete in one carton. The carton contains:

1 - Handle Assembly
1 - Engine, frame and worm gear housing Assembly
2 - Wheel and tire Assembly
4 - Tine Assemblies
1 - Hardware Pack
1 - Depth Bar

Should shortages of any of the above items occur, advise by stating packer's number listed on green packing slip, part number and description of items missing and serial number of unit.

ASSEMBLY

1. Insert the handle assembly into the frame assembly and secure the lower end with the two (2) 3/8"-16 x 1¼" long capscrews, 3/8" plain washers, 3/8" lockwashers and 3/8" hex nuts. Secure the upper end with the two (2) 3/8"-16 x 7/8" long capscrews, 3/8" lockwashers and 3/8" hex nuts. Note that the capscrew heads are on the inside.

2. Attach the throttle control assembly to the left handle with two (2) 10-24 x 1¼ long self-tapping screws supplied in the hardware pack. Loosen the capscrew holding the cable clip on the upper handle assembly and secure cable with same. Fasten the cable to the lower handle with the clip provided in the hardware pack. See Figure 1.

3. Hook the larger loop of the upper clutch wire in the clutch grip holes. Install the coil spring in the top hole of the idler lever assembly rod. Install the lower clutch wire on the coil spring. Join the upper and lower clutch wires with the wire clamp provided in the hardware pack. See Figure 1. Refer to Clutch Adjustments for correct setting.

4. Tilt the Roticul back on the handle assembly and attach the right and left inner tine assemblies to the shaft and secure with the pins and clips supplied in the hardware pack. The inner tine assemblies are shorter and will slide on easily if installed on the correct side. Insert clips completely through the pins to prevent loss. Then attach the outer tine assemblies to the inner tine assemblies in a similar manner. Check to see that the sharp edge of the upper tines face forward.

5. Tilt the Roticul forward and rest it on its engine. Insert the two (2) ½-13 x 3¼" long capscrews with the ½" plain washers on the outside of the wheel in the wheels. Install the two (2) ½" jam nuts on the wheels. Insert the wheel assembly in the lower hole on the frame upright and secure with the two (2) ½" jam nuts. Tighten the jam nuts and insure that the wheel turns freely with little wobble.

6. Install the depth bar and clamp with the round end of the depth bar toward handle and secure with the pin and clip supplied in the hardware pack.

7. This Roticul has an oilite bronze filter in the vent hole located at the rear of the worm drive housing. DO NOT REMOVE THIS FILTER.

LUBRICATION – ENGINE

Prepare and maintain engine in accordance with the instructions furnished by the engine manufacturer. Be sure to fill engine crankcase with proper oil and check air cleaner as recommended.

WORM GEAR HOUSING

THE WORM GEAR DRIVE ON THE ROTICUL IS LUBRICATED WITH SPECIAL WORM GEAR OIL AVAILABLE AT THE FACTORY.

DO NOT USE ORDINARY TRANSMISSION OILS.

If ordinary gear oil is used, gear may fail. It is filled at the factory but should be checked before use and again after every hour to five hours of operation. To add oil, the tiller should be tipped far enough backward on the handles so the housing is as near vertical as possible. FILL WITH OIL UNTIL THE OIL SHOWS AT THE PLUG WHEN TILLER IS RESTING ON TINES' DO NOT OVER FILL. Screw plug back on tight.

NOTE

During operation, the action of the worm gear drive may cause the housing to become quite warm. This is normal and no harm will be done to the gears as long as the housing is filled with special worm gear oil.

TIRES

The Roticul is supplied with two solid rubber tires permanently mounted on wheels which contain solid bearings and do not require future attention.

MISCELLANEOUS

Lubricate the idler lever and clutch grip pivot points with SAE-30 oil frequently. CAUTION – do not oil wheel bearings. Oil will collect dirt which will accelerate wear.

TINE GUARANTEE

Simplicity Manufacturing Company guarantees rotary tiller tines against breakage for the period not to exceed the normal life of the rotary tiller; and will replace broken tines directly to the customer at no charge; provided broken tines are returned prepaid to the Company's service department, Port Washington, Wisconsin.

WARRANTY

The company guarantees Simplicity Products to be free from defects in material and workmanship except the company makes no warranty express or implied with respect to tires, engines and engine accessories which generally are warranted by their respective manufacturers. Any part covered by this warranty which is proven defective within one year, under normal use, from date of purchase, will be replaced free of charge, f.o.b. Port Washington, Wisconsin, provided such part is returned to factory transportation charges prepaid and is found to be defective upon examination at the factory. The company is not obligated under this guarantee to bear cost of labor or delivery charges in replacement of defective parts. This guarantee does not apply to any Simplicity Products altered outside of Simplicity's factory. Such replacement of defective parts shall be the exclusive remedy and in no event shall Simplicity be liable for consequential damages. EXCEPT AS SPECIFICALLY PROVIDED HEREIN, THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON ANY SIMPLICITY PRODUCT.

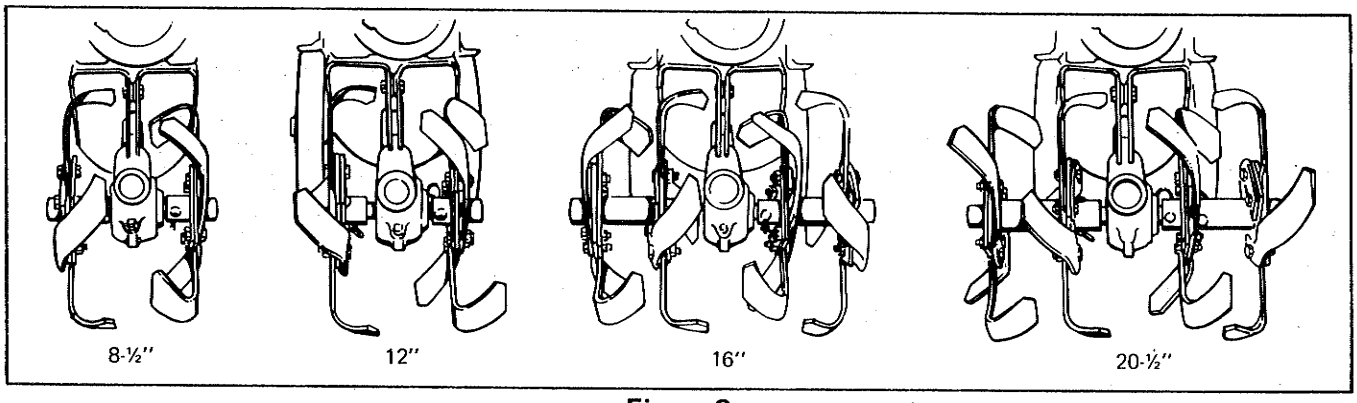


Figure 2.

ADJUSTMENT

HANDLE ASSEMBLY

Loosen the capscrews at the lower end of the handles and pijvot the handle assembly to desired height. This height is best judged under operating conditions.

CLUTCH

1. Check for proper clutching action. Make sure that the belt stops turning when the clutch lever is released and does not slip when gripped. If adjustment is needed, loosen the round head screw in the wire clamp and reposition the upper and lower clutch wires.

2. After some use the drive belt may stretch so that proper clutch action cannot be achieved. This can be overcome by moving one or two shims from above the engine casing to a position between the engine and frame on the engine mounting bolts.

TINES

The cover of this manual illustrates the tine arrangement as the tiller is shipped. The tiller will till 20-1/2" wide as standard. The two outer sets of tines may be removed for narrow cultivation by pulling the two spring clips and pins and sliding outer tine assembly off of the inner tine assembly. This permits narrow cultivation - 12" wide.

The tines may be further adjusted to cut additional width. By placing tines in position as shown in Figure 2, cutting widths may be adjusted to 8-1/2", 12", 16" or 20-1/2".

OPERATION

Before putting the Roticul into operation, make sure that the engine has been serviced completely as described in the engine instruction book provided. The Roticul, if operated properly, will allow the operator to experience finger-tip ease in preparing the ground for seeding. Before starting engine, be sure safety stop switch is lifted off of spark plug.

1. Start the Roticul engine by setting the throttle control to 1/2 to 3/4 open – open the choke and pull the starting rope. When the engine starts, close the choke and adjust the throttle to the desired speed. For tilling work, full throttle is recommended.

2. The depth bar setting will determine the depth of the tilling action. For tilling at a depth of 4 to 6 inches, install the pin through the second or third hole from the top. For a more shallow tilling action, the depth bar can be raised. Remember – the deeper the depth bar is set into the ground, the deeper the tine blades will dig into the ground.

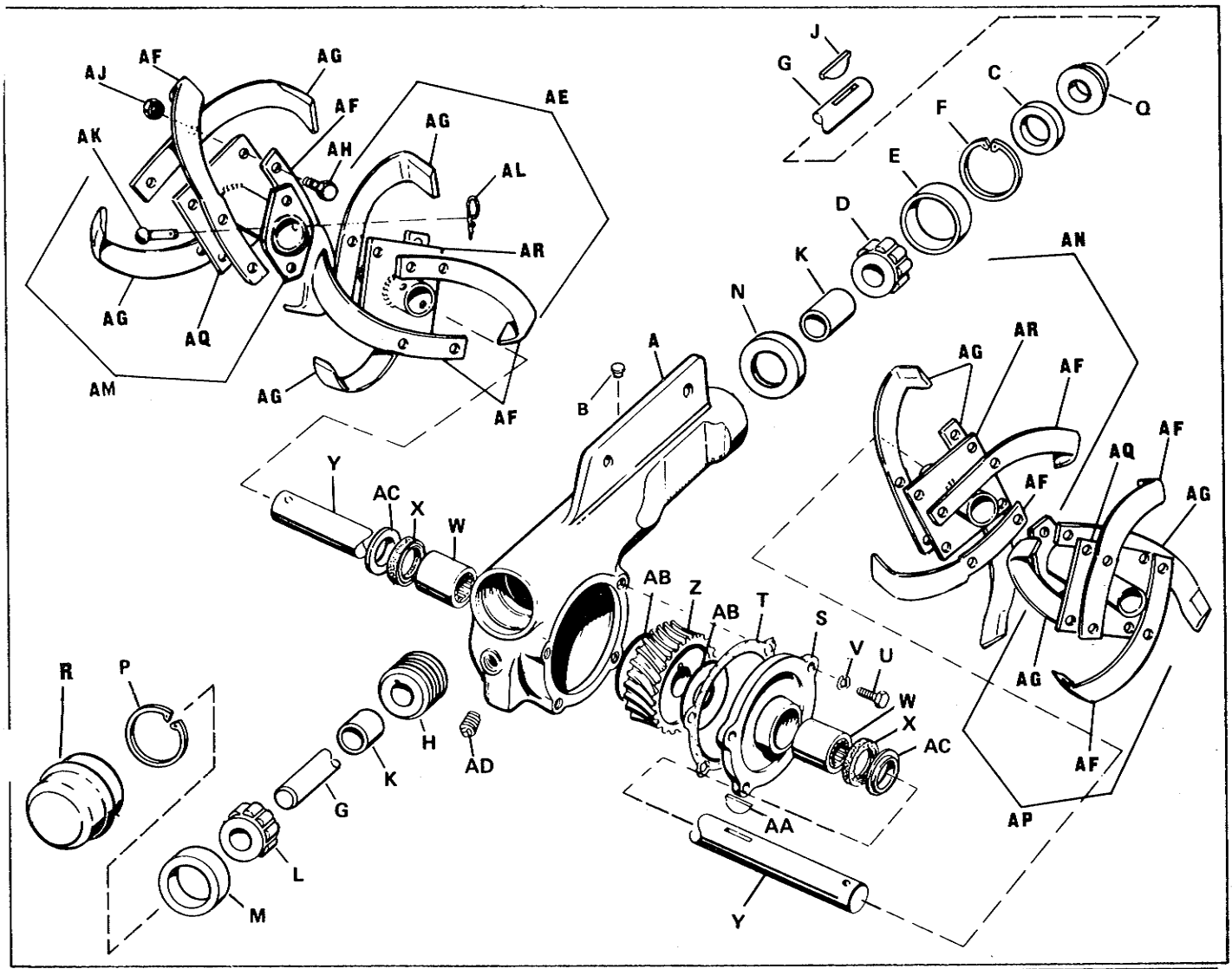
3. To maintain easy control of the tiller, the operator should use the depth bar to furnish the necessary drag on the Roticul, rather than pulling back on the handles. While operating the Roticul in preparing the ground, the operator needs only to press down on the handles for a deeper tilling action. Remember – a downward pressure on the handles results in a slow down of the forward movement and a deeper tilling action. An upward pressure on the handles results in an increase in the forward movement and a shallow tilling action.

LET THE DEPTH BAR DO THE WORK

Your Simplicity Rotary Tiller is scientifically designed to prepare the soil for planting with a minimum of effort. Do not attempt to till when the soil is very wet as this may cause lumps which are difficult to work up. If the soil is extremely hard and dry you may find it desirable to cross-till to obtain the depth you want. On the first pass, till across the plot, and on the second pass, till in the direction in which the rows will run.

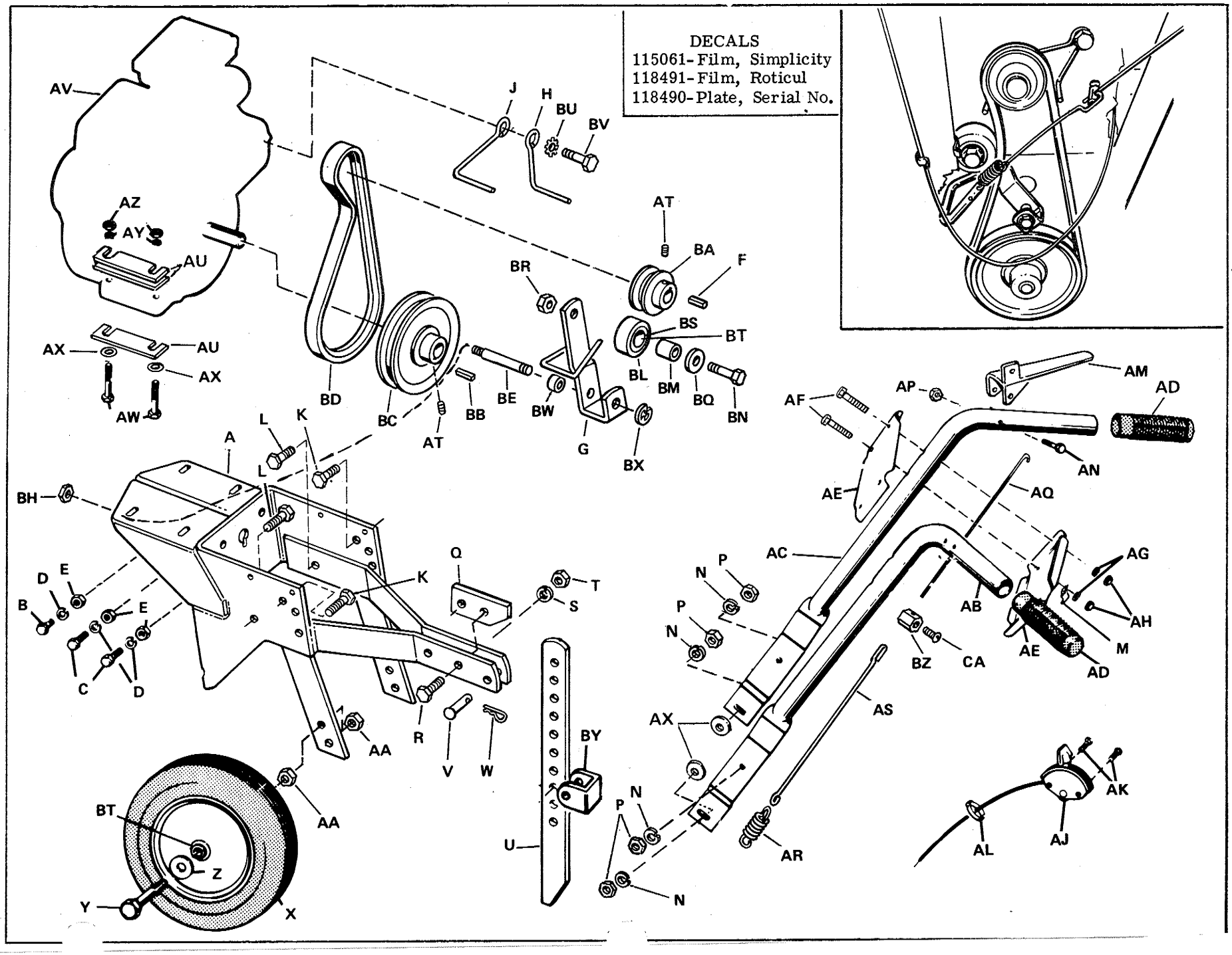
When operating your Simplicity rotary tiller for the first time, we suggest you try it for a short time to get the "feel". You will want to find the most comfortable handle position, the correct location of the depth bar for ease of operation, the engine speed best suited to your soil condition. You will soon find the correct pressure to apply to the handles. Experiment with the clutch lever, and notice the immediate response from "tickling" the clutch. You will find this very desirable when doing close cultivation with the tiller.

TINE ASSEMBLY & GEAR HOUSING



Ref. Let.	Part No.	Description	Ref. Let.	Part No.	Description
A	118392	Worm Drive Housing	W	118020	Needle Bearing
B	118462	Vent Plug	X	118118	Oil Seal
C	118393	Oil Seal	Y	118021	Worm Gear Shaft
D	154486	Roller Bearing	Z	118022	Worm Gear R.H.
E	154393	Bearing Cup	AA	725005	Woodruff Key No.91-1/4" x 3/4" Dia.
F	118396	Snap Ring	AB	118315	Thrust Washer
G	118397	Worm Shaft	AC	118403	Shield
H	118492	Worm R.H.	AD	726003	Pipe Plug
J	725502	Key	AE	118324	Tine Assembly Inner R.H.
K	118398	Spacer	AF	118294	Tine Blade, L.H.
L	154486	Roller Bearing	AG	118295	Tine Blade, R.H.
M	154393	Bearing Cup	AH	706009	Hex Capscrew,7/16"-20 x 1-1/4"
N	118399	Cup	AJ	717512	Hex Lock Nut, Full, 7/16"-20
P	118396	Snap Ring	AK	118053	Pin
Q	118400	Shield	AL	8161045	Spring Clip
R	154487	Cup	AM	118326	Tine Assembly Outer R.H.
S	118402	Cover	AN	118323	Tine Assembly Inner L.H.
T	118024	Gasket	AP	118325	Tine Assembly Outer L.H.
U	715018	Hex Capscrew 1/4"-20 x 5/8"	AQ	118046	Plate Assembly, Outer
V	720003	Lockwasher 1/4"	AR	118084	Plate Assembly, Inner

FRAME, HANDLES & CONTROLS



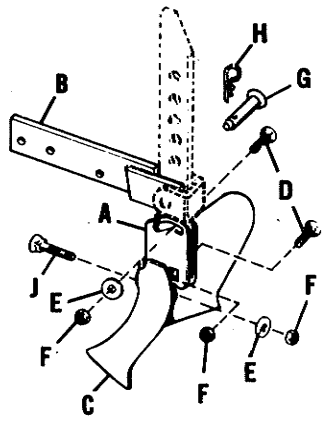
FRAME, HANDLES & CONTROLS

Ref. Let.	Part No.	Description
A	118468	Body Assembly
B	705004	Hex Capscrew, 3/8"-16 x 3/4"
C	715015	Hex Capscrew, 3/8"-16 x 1/4"
D	720002	Lock Washer, 3/8"
E	717003	Hex Nut, Full, 3/8"-16
F	8061081	Key
G	118411	Idler Lever Assembly
H	106545	Belt Stop
J	118037	Belt Stop
K	705031	Hex Capscrew, 3/8"-16 x 7/8"
L	705016	Hex Capscrew, 3/8"-16 x 1 1/4"
M	106786	Cable Clip
N	720002	Lock Washer, 3/8"
P	717003	Hex Nut, Full 3/8"-16
Q	118207	Stop Plate
R	705009	Hex Capscrew, 3/8"-16 x 1 1/2"
S	720002	Lock Washer, 3/8"
T	717003	Hex Nut, Full, 3/8"-16
U	118081	Depth Bar
V	105249	Pin
W	8161045	Spring Clip
X	118469	Wheel & Tire Assembly
Y	715108	Hex Capscrew, 1/2"-13 x 3
Z	719004	Plain Washer, 1/2"
AA	717017	Hex Jam Nut, 1/2"-13
AB	118466	Handle, L.H.
AC	118467	Handle, R.H.
AD	106558	Handle Grip
AE	118298	Handle Cover, Upper
AF	705025	Hex Capscrew, 1/4"-20 x 1 1/2"
AG	720003	Lock Washer, 1/4"
AH	717005	Hex Nut, Full, 1/4"-20
AJ	118300	Throttle Control Assembly
AK	715102	Self-Tapping Screw, No. 10-24 x 1 1/4

Ref. Let.	Part No.	Description
AL	8061108	Cable Clip
AM	118431	Clutch Grip
AN	705025	Hex Capscrew, 1/4"-20 x 1 1/2"
AP	717513	Hex Lock Nut, Full 1/4"-20
AQ	161090	Spring Extension
AR	118495	Spring
AS	118455	Extension Wire
AT	713503	Set Screw, 5/16"-18 x 5/16"
AU	118463	Shim
AV		Engine 3 HP, Briggs & Stratton
AW	705020	Hex Capscrew, 5/16"-18 x 2
AX	719002	Plain Washer, 5/16"
AY	720001	Lock Washer, 5/16"
AZ	717001	Hex Nut, Full, 5/16"-18
BA	118027	Engine Pulley
BB	118439	Key
BC	118470	Pulley (Driven)
BD	118312	V-Belt
BE	118465	Pivot Pin
BH	717001	Hex Nut, Full, 5/16"-18
BL	101002	Idler Pulley Assembly
BM	819020	Spacer
BN	705009	Hex Capscrew, 3/8"-16 x 1 1/2"
BQ	719002	Plain Washer, 5/16"
BR	717524	Hex Nut, Lock, 3/8"-16
BS	8161243	Bearing
BT	118132	Bushing
BU	721506	Lock Washer, 1/2"
BV	706017	Hex Capscrew, 1/2"-20 x 1"
BW	118472	Spacer
BX	158399	Retaining Ring
BY	118447	Clamp
BZ	161092	Clamp, Wire
CA	710006	Rd. Hd. Screw, No. 10-24 x 3/8"

FURROW OPENER – MFR.'S NO. 340

A furrow opener shovel is available which mounts on the depth bar. You will find this shovel very handy for digging furrows for crops such as potatoes that are planted in rows. When installing the furrow opener, turn the depth bar upside down and bolt to the tool holder with the carriage bolts, washers and nuts supplied. Remove the stop plate from between the support assemblies on the Roticul and install the extension support assembly with the same hardware. The depth bar is then positioned in this extension, the clamp installed and these pieces secured with the pin and clip supplied.



Ref. Let.	Part No.	Description
A	8271503	Tool Holder
B	118287	Extension Support Assembly
C	103010	8" Furrow Opener
D	703002	Carriage Bolt, 3/8-16 x 1-1/4" lg.
E	719001	Plain Washer, 3/8"
F	717003	Hex Nut, Full, 3/8-16
G	118053	Pin
H	8161045	Spring Clip
J	704002	Plow Bolt

TINE EXTENSION SET MFR.'S NO. 212

The tine extension set consists of a left hand and right hand tine assembly. These additional extensions will allow an increase from the standard 20-1/2" tilling width to a width of 29-1/2" as shown in Figure 3. To install the extension tines, place long hubs of extension tines over hubs of tines previously installed, and secure with pin and spring clip. Be sure the extension tines are so mounted that the sharp edges of the tines on top face forward.

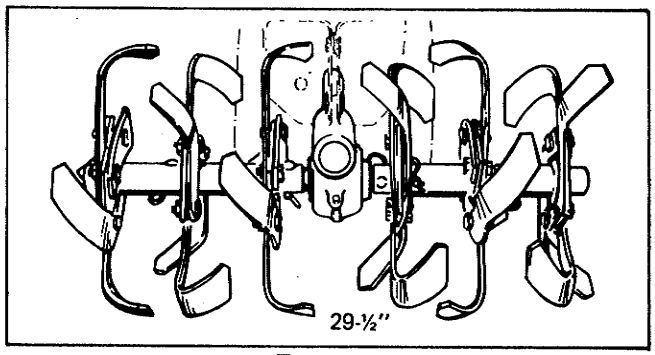
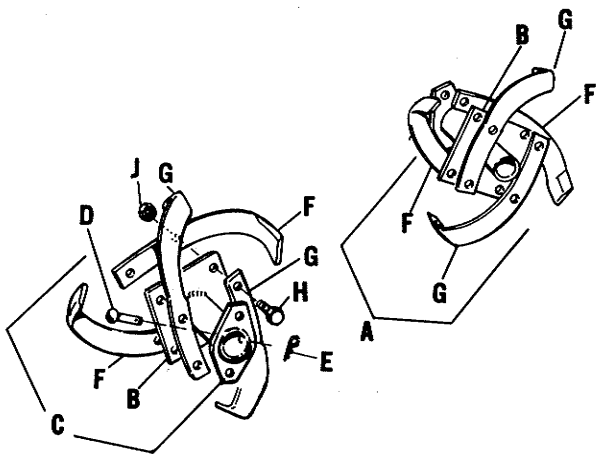


Figure 3.

Ref. Let.	Part No.	Description
A	105222	Left Hand Tine Blade Extension Assembly, Complete
B	105221	Plate Assy., Tine Extension
C	105223	Right Hand Tine Blade Extension Assembly, Complete
D	118053	Pin
E	8161045	Spring Clip
F	8152001	Left Hand Tine Blade
G	8152002	Right Hand Tine Blade
H	706009	Hex Capscrew, 7/16-20 x 1-1/4" lg.
J	717512	Hex Nut, Full, 7/16-20



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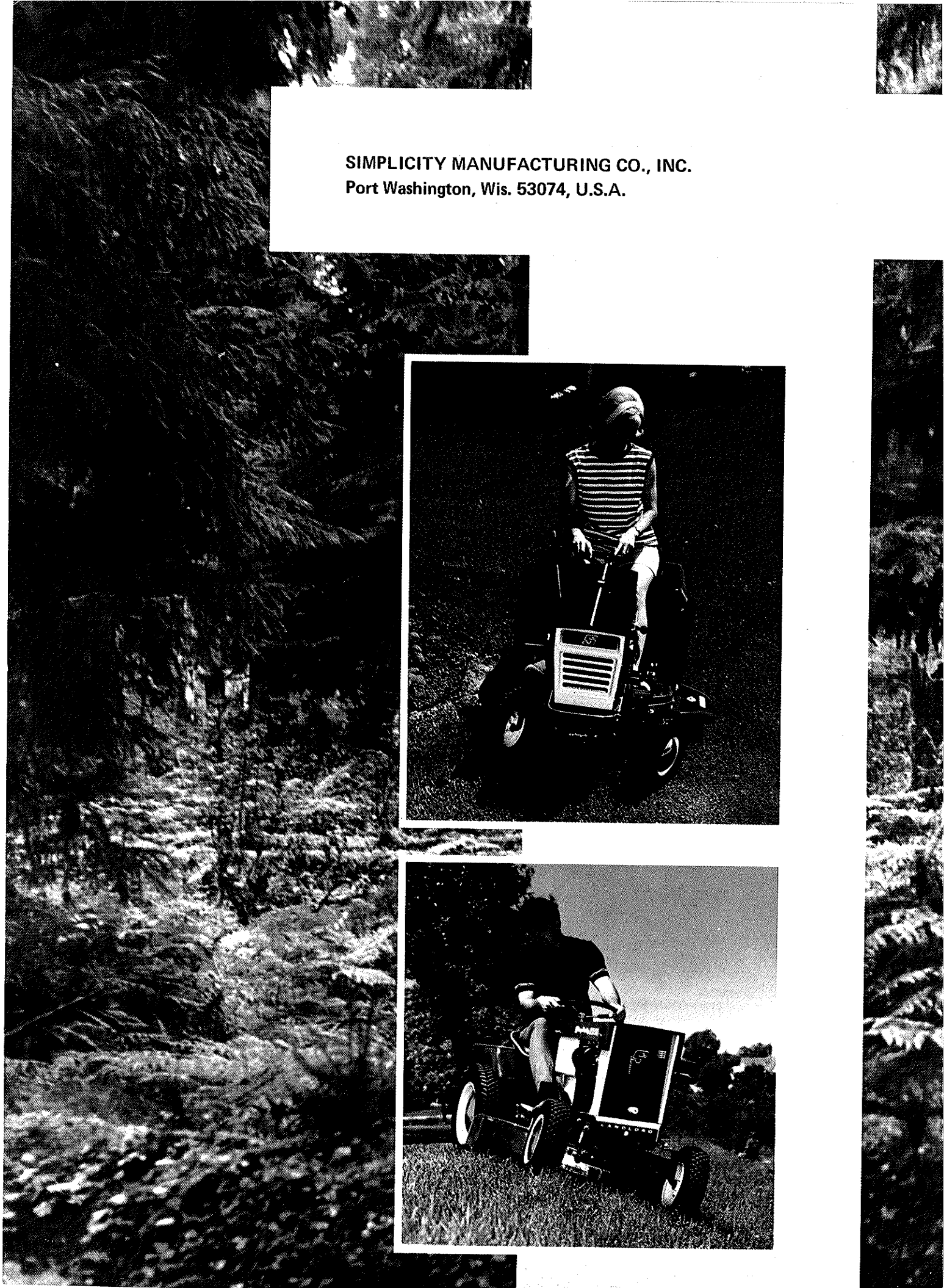

SIMPLICITY MANUFACTURING CO., INC.
Port Washington, Wis. 53074, U.S.A.